<u>Research Protocol</u>

Evaluation of Training Curriculum and Service of

Improving Access to Community Therapies

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Introduction

Prevalence of common mental disorders

Depression and anxiety disorders are widespread both globally and locally (Kessler et al., 2005). In 2015, the worldwide prevalence of depression stood at 4.4%, while anxiety had a prevalence rate of 3.6% (World Health Organization, 2017). In the context of Hong Kong, the prevalence of major depressive disorder (MDD) reached 2.9%, whereas the prevalence of generalized anxiety disorder (GAD) was 4.2% (Lam et al., 2015). Given the detrimental effects of mental disorders on an individual's quality of life and productivity (Alonso et al., 2004; Lim, Sanderson, & Andrews, 2000), the delivery of mental health services is of paramount importance.

The psychological treatment accessibility gap

Nonetheless, the availability of psychological interventions falls significantly short of the demand for such services. Among those with mental health issues in Hong Kong, less than 30% utilized mental health services (Lam et al., 2015). New patients typically face a waiting period of approximately one year before consulting with a psychiatrist. Furthermore, consultations with a clinical psychologist occur only once every two to six months. Extended waiting times and infrequent follow-ups may present barriers to the utilisation of mental health services.

In addition, an imbalanced distribution of mental health resources contributes to the gap in accessibility. A majority of resources are heavily concentrated within hospital-based mental health services. Consequently, individuals with severe mental disorders receive a greater share of resources from the healthcare system, while those with less severe symptoms have limited access to resources. Moreover, waiting times for mental health services are determined by the severity of symptoms. As a result, individuals experiencing mild to moderate depression or anxiety face longer waiting periods before their initial meeting with a mental health professional. In essence, those with less severe mental illnesses have access to fewer resources and experience longer waiting times, further diminishing their access to psychological treatments.

Improving Access to Psychological Therapies

In an effort to bridge the accessibility gap, the UK launched the Improving Access Psychological Therapies (IAPT) programme, aimed at individuals with mild to moderate depression and anxiety (Whiteford et al., 2013). The National Institute for Clinical Excellence (NICE) guidelines recommend cognitive behavioural therapy (CBT) as the primary treatment for those with lower severity mood disorders. Numerous studies have

consistently found evidence supporting the effectiveness of traditional, high-intensity, face-to-face CBT. Low-intensity cognitive behavioural therapy (LICBT), developed through the IAPT programme, has received empirical backing in the treatment of MDD, GAD, panic disorder, and specific phobia (Clark, 2011; NICE, 2004; NICE, 2009). The IAPT programme not only fosters early identification and categorisation of mental health issues but also enables efficient resource allocation based on severity. Individuals with less severe symptoms receive low-intensity interventions, while those with more severe psychiatric problems are escalated to intensive treatment.

Clark et al. (2009) showed that among participants who attended two or more sessions, 55-56% had recovered after the intervention's conclusion, with clinical outcomes maintained at a 10-month follow-up. Similarly, Richards and Suckling (2009) reported large pre-post-treatment effect sizes for depression and anxiety, specifically 1.41 and 1.39, respectively. The combined remission and recovery rates were also high for both depression (76%) and anxiety (74%). In another extensive study, 40.3% of participants achieved reliable recovery, and 63.7% demonstrated reliable improvement after receiving the IAPT programme (Gyani, Shafran, Layard, & Clark, 2013). Overall, numerous investigations have indicated that LICBT in the form of guided self-help successfully alleviates mild to moderate depressive and anxiety disorders. According to a meta-analysis conducted by Cuijpers, Donker, van Straten, Li, & Andersson (2010), the efficacy of guided self-help is comparable to that of traditional CBT in treating mood disorders (Cohen's d = -0.02). The benefits of the guided self-help approach include reduced waiting times for mental health services and the timely provision of interventions for mild to moderate mood disorders.

LICBT is a disorder-specific intervention, it adopts different CBT intervention strategies for different presenting problems, for example, behavioural activation for depression, worry time and problem solving for generalised anxiety, and exposure and habituation for panic and phobia. Transdiagnostic intervention has been gaining evidence over the past decade to target the underlying psychological mechanism and thus treat different presenting problems with the same set of strategies. Acceptance and commitment therapy (ACT) is one of the well-researched intervention approaches. Meta-analysis showed that ACT can effectively reduce the level of depression and anxiety, while brief ACT approach also showed promising results (Bai, Luo, Zhang, Wu, & Chi, 2020; Haller, Breilmann, Schröter, Dobos, & Cramer, 2021; Kyllönen, Muotka, Puolakanaho, Astikainen, Keinonen, & Lappalainen, 2018).

Mental Health in Hong Kong

Due to the huge success of the IAPT programme, its concept is worth borrowing and applying to Hong Kong. Mind Mental Health Hong Kong (Mind HK) has launched a programme named Improving Access to Community Therapies, or 'iACT' for short. iACT was developed in accordance with the IAPT programme and incorporated the principles of low-intensity psychological intervention and ACT principles. In this programme, Mind HK will train 30 bachelor's degree holders to study a low-intensity psychological intervention programme. The study programme consists of 120 hours of intensive training and a 9-month placement in community settings, including non-government organisations, schools, and private clinics. The trained psychological well-being practitioners (PWPs) will provide low-intensity acceptance and commitment therapy (LIACT) to around 300 adults who are screened with mild to severe depressive or anxiety symptoms without imminent risk.

Individuals will later receive LIACT offered by PWPs and complete guided self-help workbooks with guidance. PWPs will be trained and supervised for providing LIACT. In addition to the 120-hour training, they received regular supervision from recognised supervisors, including clinical psychologists, social workers, and experienced counsellors. Aspects of case management and clinical skills will be covered during supervision. Despite the promising results of the IAPT programme, the effectiveness of LIACT in a local context has yet been examined.

Aims of the study

The current study aims to conduct a comprehensive evaluation of a training curriculum designed for teaching low-intensity psychological interventions to bachelor's degree holders, specifically focusing on principles of Acceptance and Commitment Therapy (ACT) and its intervention effectiveness. This evaluation is divided into two integral parts. In the first part, the curriculum, which encompasses a 120-hour intensive teaching block followed by a nine-month placement, will be evaluated. To assess the trainees' competencies in applying the principles of ACT, a series of role-play examinations will be administered at various time points, including pre-training, pre-placement, mid-placement, and end-of-placement. Focus groups will be conducted.

The second part of the evaluation is to examine the outcomes of low-intensity psychological interventions, delivered by the trainees, targeting adult individuals (age >=18) screened with mild to severe symptoms of depression and anxiety. To achieve this, a series of questionnaires will be administered at several stages: pre-intervention, during each session, and at a three-month follow-up. Outcome measures will include the assessment of depressive

and anxiety symptom severity, quality of life, functional impairment, therapeutic alliance, and the level of experiential avoidance. Individual exit interviews and focus groups will be conducted.

Hypotheses

It is hypothesised that the competency level of the training participants will increase after the intensive training block and the placement. It is hypothesised that after receiving the low-intensity psychological intervention based on the Acceptance and Commitment Therapy (ACT) principle, the depression and anxiety scores, functioning impairment, and experiential avoidance level will reduce, and quality of life and therapeutic relationship will improve.

Methodology

Training Participants

Participants from the Psychological Wellbeing Practitioners (PWPs) Programme will be invited to participate in the research. The PWPs are degree holders who will undergo 120 hours of intensive training block, followed by 9 months of placement to practise the learnt skills. Given therapist competency will be part of the programme, this research will request the participants to consent to the use of the data collected in the programme.

Service Participants

Individuals with depression or anxiety symptoms will be sampled in this study. Participants will be recruited from the placement organisations and promotions on social media, web pages, and at mental health centres. The sample size is estimated to be 300 individuals for initial screening for LIACT-guided self-help services.

Inclusion criteria

1. Adults aged 18-65
2. Adults with a specific set of presenting problems
3. Anxiety problems (including social, generalised, health anxiety, work anxiety)
4. Mild to moderate depression
5. Other emotional challenges include (but not limited to): Low self-esteem, perfectionism, mild anger issues, interpersonal or relational challenges, low motivation, lack of purpose, and numbness

Exclusion criteria

1. Adults with the following features/presentations are not eligible for the PWP programme and should automatically lead to an onward referral:
2. High severity on depressive score (PHQ9 >= 20)

3. High or imminent risk (according to scores on PHQ9 question no. 9 and information emerging at triage assessment, including indication of plan and action or the lack of protective factor)

4. Any of the following presentations or situations: diagnosis or features of a mental health problem that is not suitable for low-intensity intervention, obsessive compulsive disorder, post-traumatic stress disorder, bipolar disorder, schizophrenia and other psychotic disorders, dissociative disorders, personality disorders, eating disorders, gender dysphoria, paraphilic disorders, anger issues as primary presenting concern (without anxiety or depression), sleep issues as primary presenting concern (without anxiety or depression), psychotic experiences (e.g. hallucinations), substance-related disorders, history of trauma or abuse that is considered highly relevant to the current presenting problem they are seeking support for, planned changes to psychotropic medication during the period of PWP intervention, currently receiving regular psychological counselling or support from another practitioner for at least twice a month, diagnosis of a learning disability, cognitive impairment or neurodevelopmental condition that would impair their ability to engage with a structured, manualised intervention (e.g. untreated ADHD or moderate-severe brain injury), clear safeguarding concerns requiring multi-agency support (e.g. concerns about domestic abuse)

Research design

For training evaluation, given the current training programme has already consists of therapist competency assessment to ensure the quality of the training participants. A record of role-play videos will be rated the ACT therapist competency by trained psychologists at pre-training, after intensive training block, mid-placement and post-placement. A consent form will be sent to the training participant to authorise the use of data for analysis. Repeated measures design will be adopted for this study.

Repeated measures design will be adopted for this study. Individual guided self-help LIACT service, eligible participants will receive 6-8 sessions of guided self-help LIACT over three to four months. Clinical outcomes (depression and anxiety levels) will be measured at every session, it will take around 5 minutes to complete these two routine outcome measures. Other primary and secondary outcome measures, including general well-being, functioning and activity impairment, psychological flexibility, experiential avoidance, and therapeutic alliance will be at 3 time points, namely pre-treatment, post-treatment (at the end of the last session) and 6-week follow-up. Participants will take around 20 minutes to complete the full package of assessments. These outcome variables will be additionally measured after each

session to avoid missing data if participants drop out. Recovery rate and reliable improvement rate will also be used as indicators to evaluate the efficacy of LIACT. Focus groups will be conducted on participants who drop out and complete the programme to understand their experience and journey.

Curriculum

The LIACT training curriculum is designed by registered clinical psychologists with consultation from local ACT experts from the Association of Contextual and Behavioural Science (Hong Kong Chapter). There are 5 modules in the intensive training block including introduction, professional and ethics issues, application of ACT low-intensity intervention, troubleshooting and preparation for clinical placement. The LIACT protocol is also piloted and revised by clinical psychologists to ensure its adaptability to local situations. After 120 hours of intensive training, the training participants will attend a role-play exam to ensure their competency to proceed with the 9-month placement. During the 9-month placement, each PWP is expected to see at least 15 direct service beneficiaries to provide LIACT. During which, supervision will be provided regularly to ensure the quality of service delivery and risk management. There will be a mid-placement review and final placement review, and the training participants will submit audio recordings for supervisors to rate for their competence. Focus groups will be conducted for the training participants to understand their learning experience.

Treatment

Guided self-help LIACT will be provided to eligible participants. For individual guided self-help LIACT service, intake assessment will be conducted to assess the presenting problem of the participants at pre-treatment to ensure the suitability to receive LIACT service. Participants will be given the LIACT self-help workbook collaboratively with a PWP. Between each session, clients will read through the workbook and complete the exercises suggested in the workbook. In subsequent sessions, PWP will guide clients to overcome the difficulties in performing the LIACT exercises.

Therapists

PWPs will be responsible for providing LIACT to the participants. PWPs have completed a 120-hour intensive training and pass the role play examination prior to placement provision. The training was provided by experienced clinical psychologists and counsellors. Moreover, PWPs are under regular supervision by clinical psychologists, experienced counsellors, or social workers with extensive ACT training.

Outcome Measures

Training evaluation.

1. General counselling skills - ENhancing Assessment of Common Therapeutic factors rating scales (ENACT; Kohrt et. al., 2015): The 18-item ENACT scale assesses the levels of common factors in psychotherapeutic settings. The domains covered include *non-verbal and verbal communication, rapport and self-disclosure, collaborative processes, problem-solving, assessing functional impairment* etc. Each item is rated on a scale from 1 ("needs improvement") to 3 ("done well").

2. ACT competency - The ACT Fidelity Measure (ACT-FM; O'Neill et. al., 2019): ACT-FM is a 25-item measure evaluating the clinicians' fidelity to ACT according to four key aspects: *Therapist Stance, Open Response Style, Aware Response Style* and *Engaged Response Style*. The measure focuses on the therapists' frequency of desired and unpreferred therapeutic behaviour. It is possible for therapists to demonstrate both ACT-consistent (e.g. "Therapist helps the client to notice thoughts as separate experiences from the events they describe") and -inconsistent (e.g. "*Therapist imposes their own, other's or society's values upon the client*") behaviours to co-exist, therefore, the scores are calculated into two separate subscales - ACT Consistency Score and ACT Inconsistency Score, both range from 0 to 36 marks.

Service evaluation.

1. Depression level: The PHQ-9 (Patient Health Questionnaire-9) is a widely-used self-report screening tool designed to assess the severity of depressive symptoms in individuals. The PHQ-9 contains nine items, each corresponding to one of the major depressive disorder criteria. Respondents are asked to rate the frequency with which they have experienced each symptom over the past two weeks on a 4-point Likert scale, ranging from 0 (not at all) to 3 (nearly every day). The total score ranges from 0 to 27, with higher scores indicating greater severity of depressive symptoms.

2. Anxiety level: The GAD-7 (Generalised Anxiety Disorder-7) is a self-report questionnaire designed to assess the severity of generalised anxiety disorder symptoms in individuals. It comprises seven items, each reflecting a symptom of generalised anxiety disorder as outlined in the Diagnostic and Statistical Manual of Mental Disorders (DSM). Respondents are asked to rate the frequency with which they have experienced each symptom over the past two weeks on a 4-point Likert scale, ranging from 0 (not at all) to 3 (nearly every day). The total score ranges from 0 to 21, with higher scores indicating a greater severity of anxiety symptoms. The GAD-7 is widely used in clinical and research

settings for screening, diagnosis, and monitoring treatment outcomes in patients with anxiety disorders.

3. Well-being: The World Health Organisation - Five Well-Being Index (WHO-5) is a questionnaire that measures current mental well-being, originally developed to assess both positive and negative well-being. This five-question version uses only positively phrased questions to avoid symptom-related language. Response options are indicative of the frequency of particular feelings (e.g. "I woke up feeling fresh and rested.") in Likert format, ranging from 0 ("at no time") to 5 ("all of the time").

4. Functioning impairment: The Work and Social Adjustment Scale (WSAS; Mundt et. al., 2002) is a self-report measure developed to assess functional impairment in daily life across five domains: work, home management, social leisure, private leisure, and family relationships. Each domain is rated on a 9-point Likert scale, ranging from 0 (no impairment) to 8 (very severe impairment), with higher scores indicating greater functional impairment. The total score ranges from 0 to 40. The WSAS is commonly used to evaluate the impact of psychological disorders on an individual's daily functioning and to monitor treatment progress.

5. Psychological flexibility: The Acceptance and Action Questionnaire (AAQ-2; Bond et. al., 2011) is a widely-used measure designed to assess psychological inflexibility, which is a central concept in Acceptance and Commitment Therapy (ACT). In this 7-item self-report scale, participants choose from 1 ("never true") to 7 ("always true") to depict the relevance of the statements and themselves.

6. Therapeutic alliance: The Working Alliance Inventory (WAI) was developed by Horvath and Greenberg in 1989. The brief revised version (Brief Revised Working Alliance Inventory; BR-WAI) consists of 12 items available multilingually (including Chinese). The scale is rated on a 5-point Likert scale, ranging from 1 (never) to 5 (always).

7. Experiential avoidance: The Brief Experiential Avoidance Questionnaire (BEAQ; Gámez et. al., 2014) is a shortened 15-item self-report measure designed to assess experiential avoidance, or the avoidance of uncomfortable or distressing thoughts and emotions. These statements are scored on a scale ranging from 1 (strongly agree) to 6 (strongly

8. Work Productivity and Activity Impairment: Work Productivity and Activity Impairment Questionnaire: General Health (WPAI) was developed by Reilly et. al. (1993) to measure impairments in both paid work and daily activities due to health-related problems. The domains covered include work time missed, impairment at work, productivity loss and activity impairment.

9.

Data analyses

For individual service, only the data of participants who have attended two or more follow-up sessions will be included for analysis. The first assessment session will not be counted for this requirement. Firstly, inter-correlations among all outcome measures will be assessed with Pearson's correlation coefficients. Secondly, the changes in outcome variables between pre-treatment, post-treatment and 3-month follow-up will be evaluated with repeated measures ANOVA. Cohen's d will be calculated to assess the relative effect sizes. Furthermore, reliable significant improvement will be computed according to the method recommended by Jacobson & Truax (1991), which is the division of pre-post treatment score difference by the standard error.

Compliance

The protocol of this study complies with the Declaration of Helsinki, IGH-GCP and research ethics principles to protect the rights, safety and well-being of participants.

References

Alonso, J., Angermeyer, M. C., Bernert, S., Bruffaerts, R., Brugha, T. S., Bryson, H., . . . Vollebergh, W. A. M. (2004). Disability and quality of life impact of mental disorders in Europe: results from the European Study of the Epidemiology of Mental Disorders (ESEMeD) project. *Acta Psychiatr Scand Suppl, 109*(s420), 38-46. doi:10.1111/j.1600-0047.2004.00329.x

Antony, M. M., Bieling, P. J., Cox, B. J., Enns, M. W., & Swinson, R. P. (1998). Psychometric Properties of the 42-Item and 21-Item Versions of the Depression Anxiety Stress Scales in Clinical Groups and a Community Sample. *Psychological assessment, 10*(2), 176-181.

Bai, Z., Luo, S., Zhang, L., Wu, S., & Chi, I. (2020). Acceptance and commitment therapy (ACT) to reduce depression: A systematic review and meta-analysis. *Journal of affective disorders*, *260*, 728-737.

Bastien, C. H., Vallières A., Morin, C. M. (2001). Validation of the Insomnia Severity Index as an outcome measure for insomnia research. *Sleep medicine, 2*(4), 297-307. doi:10.1016/s1389-9457(00)00065-4

Belanger, L., Savard, J., & Morin, C. M. (2006). Clinical Management of Insomnia Using Cognitive Therapy. *Behav Sleep Med, 4*(3), 179-202. doi:10.1207/s15402010bsm0403_4

Bond, F. W., Hayes, S. C., Baer, R. A., Carpenter, K. M., Guenole, N., Orcutt, H. K., Waltz, T., & Zettle, R. D. (2011). Preliminary psychometric properties of the Acceptance and Action Questionniare - II: A revised measure of psychological flexibility and experiential avoidance. *Behavior Therapy, 42,* 676-688.

Chung, K.-F., Ho, F. Y.-Y., & Yeung, W.-F. (2016). Psychometric Comparison of the Full and Abbreviated Versions of the Dysfunctional Beliefs and Attitudes about Sleep Scale. *Journal of clinical sleep medicine, 12*(6), 821-828.

Clark, D. M. (2011). Implementing NICE guidelines for the psychological treatment of depression and anxiety disorders: The IAPT experience. *Int Rev Psychiatry, 23*(4), 318-327. doi:10.3109/09540261.2011.606803

Clark, D. M., Layard, R., Smithies, R., Richards, D. A., Suckling, R., & Wright, B. (2009). Improving access to psychological therapy: Initial evaluation of two UK demonstration sites. *Behav Res Ther, 47*(11), 910-920. doi:10.1016/j.brat.2009.07.010

Cuijpers, P., Donker, T., van Straten, A., Li, J., & Andersson, G. (2010). Is guided self-help as effective as face-to-face psychotherapy for depression and anxiety disorders? A

systematic review and meta-analysis of comparative outcome studies. *Psychol Med, 40*(12), 1943-1957. doi:10.1017/S0033291710000772

Espie, C. A., Inglis, S. J., Harvey, L., & Tessier, S. (2000). Insomniacs' attributions: psychometric properties of the Dysfunctional Beliefs and Attitudes about Sleep Scale and the Sleep Disturbance Questionnaire. *J Psychosom Res, 48*(2), 141-148. doi:10.1016/S0022-3999(99)00090-2

Gámez, W., Chmielewski, M., Kotov, R., Ruggero, C., Suzuki, N., & Watson, D. (2014). The Brief Experiential Avoidance Questionnaire: Development and initial validation. *Psychological Assessment, 26*(1), 35–45. https://doi.org/10.1037/a0034473

Gyani, A., Shafran, R., Layard, R., & Clark, D. M. (2013). Enhancing recovery rates: Lessons from year one of IAPT. *Behav Res Ther, 51*(9), 597-606. doi:10.1016/j.brat.2013.06.004

Haller, H., Breilmann, P., Schröter, M., Dobos, G., & Cramer, H. (2021). A systematic review and meta-analysis of acceptance-and mindfulness-based interventions for DSM-5 anxiety disorders. *Scientific reports*, *11*(1), 20385.

Herdman, M., Gudex, C., Lloyd, A., Janssen, M. F., Kind, P., Parkin, D., . . . Badia, X. (2011). Development and preliminary testing of the new five-level version of EQ-5D (EQ-5D-5L). *Quality of Life Research, 10*(20), pp. 1727-1736.

Janssen, M. F., Pickard, A. S., Golicki, D., Gudex, C., Niewada, M., Scalone, L., . . . Busschbach, J. (2013). Measurement properties of the EQ-5D-5L compared to the EQ-5D-3L across eight patient groups: a multi-country study. *Quality of Life Research, 7*(22), pp. 1717-1727. doi:https://doi.org/10.1007/s11136-012-0322-4

Jacobson, N. S., & Truax, P. (1991). Clinical significance: a statistical approach to defining meaningful change in psychotherapy research. *J Consult Clin Psychol, 59*(1), 12-19. doi:10.1037//0022-006X.59.1.12

Kessler, R. C., Berglund, P., Demler, O., Jin, R., Merikangas, K. R., & Walters, E. E. (2005). Lifetime Prevalence and Age-of-Onset Distributions of DSM-IV Disorders in the National Comorbidity Survey Replication. *Archives of General Psychiatry, 62*(6), 593-602. doi:10.1001/archpsyc.62.6.593

Kohrt, B. A., Jordans, M. J., Rai, S., Shrestha, P., Luitel, N. P., Ramaiya, M. K., Singla, D. R., & Patel, V. (2015). Therapist competence in global mental health: Development of the ENhancing Assessment of Common Therapeutic factors (ENACT) rating scale. *Behaviour research and therapy*, *69*, 11–21. https://doi.org/10.1016/j.brat.2015.03.009

Kyllönen, H. M., Muotka, J., Puolakanaho, A., Astikainen, P., Keinonen, K., & Lappalainen, R. (2018). A brief acceptance and commitment therapy intervention for depression: A randomized controlled trial with 3-year follow-up for the intervention group. *Journal of contextual behavioral science*, *10*, 55-63.

Kroenke, K., & Spitzer, R. L. (2002). The PHQ-9: A New Depression Diagnostic and Severity Measure. *Psychiatric annals, 32*(9), 509-515. doi:10.3928/0048-5713-20020901-06

Lam, L. C.-W., Wong, C. S.-M., Wang, M.-J., Chan, W.-C., Chen, E. Y.-H., Ng, R. M.-K., . . . Bebbington, P. (2015). Prevalence, psychosocial correlates and service utilization of depressive and anxiety disorders in Hong Kong: the Hong Kong Mental Morbidity Survey (HKMMS). *Soc Psychiatry Psychiatr Epidemiol, 50*(9), 1379-1388. doi:10.1007/s00127-015-1014-5

Lim, D., Sanderson, K., & Andrews, G. (2000). Lost productivity among full‑time workers with mental disorders. *J Ment Health Policy Econ, 3*(3), 139-146. doi:10.1002/mhp.93

Lovibond, P. F., & Rapee, R. M. (1993). The representation of feared outcomes. *Behav Res Ther, 31*(6), 595-608. doi:10.1016/0005-7967(93)90111-7

Meyer, T. J., Miller, M. L., Metzger, R. L., & Borkovec, T. D. (1990). Development and validation of the penn state worry questionnaire. *Behav Res Ther, 28*(6), 487-495. doi:10.1016/0005-7967(90)90135-6

Morin, C. M., Belleville, G., Bélanger, L., & Ivers, H. (2011). The Insomnia Severity Index: Psychometric Indicators to Detect Insomnia Cases and Evaluate Treatment Response. *Sleep, 34*(5), 601 - 608.

Mundt, J. C., Marks, I. M., Shear, M. K., & Greist, J. M. (2002). The Work and Social Adjustment Scale: a simple measure of impairment in functioning. *Br J Psychiatry, 180*(5), 461-464. doi:10.1192/bjp.180.5.461

National Institute for Health and Clinical Excellence [NICE]. (2004). Management of anxiety in adults in primary, secondary and community care: Clinical Guideline 22. *London: National Institute for Clinical Excellence*.

National Institute for Health and Clinical Excellence [NICE]. (2009). *Depression: treatment and management of depression in adults, including adults with a chronic physical health problem*: NICE.

National Institute for Health and Care Excellence [NICE]. (2011, 05 25). Retrieved 06 15, 2022, from Common mental health problems: identification and pathways to care: https://www.nice.org.uk/guidance/cg123/chapter/Recommendations

Ng, S. S. W., Lo, A. W. Y., Leung, T. K. S., Chan, F. S. M., Wong, A. T. Y., Lam, R. W. T., &
Tsang, D. K. Y. (2014). Translation and validation of the Chinese version of the short
Warwick-Edinburgh mental well-being scale for patients with mental Illness in Hong
Kong. *East Asian archives of psychiatry, 24*(1), 3-9.

O'Neill, L., Latchford, G., McCracken, L. M., & Graham, C. D. (2019). The development of
the Acceptance and Commitment Therapy Fidelity Measure (ACT-FM): A delphi
study and field test. *Journal of Contextual Behavioral Science, 14*, 111–118.
https://doi.org/10.1016/j.jcbs.2019.08.008

Richards, D. A., & Suckling, R. (2009). Improving access to psychological therapies: Phase
IV prospective cohort study. *Br J Clin Psychol, 48*(4), 377-396.
doi:10.1348/014466509X405178

Reilly, M. C., Zbrozek, A. S., & Dukes, E. M. (1993). The Validity and Reproducibility of a
Work Productivity and Activity Impairment Instrument. *PharmacoEconomics, 4*(5),
353–365. https://doi.org/10.2165/00019053-199304050-00006

Spitzer, R. L., Kroenke, K., Williams, J. B. W., & Löwe, B. (2006). A Brief Measure for
Assessing Generalized Anxiety Disorder: The GAD-7. *Arch Intern Med, 166*(10),
1092-1097. doi:10.1001/archinte.166.10.1092

Stewart-Brown, S., Tennant, A., Tennant, R., Platt, S., Parkinson, J., & Weich, S. (2009).
Internal construct validity of the Warwick-Edinburgh Mental Well-being Scale
(WEMWBS): a Rasch analysis using data from the Scottish Health Education
Population Survey. *Health Qual Life Outcomes, 7*(1), 15-15.
doi:10.1186/1477-7525-7-15

Tennant, R., Hiller, L., Fishwick, R., Platt, S., Joseph, S., Weich, S., . . . Stewart-Brown, S.
(2007). The Warwick-Edinburgh Mental Well-being Scale (WEMWBS): development
and UK validation. *Health Qual Life Outcomes, 5*(1), 63-63.
doi:10.1186/1477-7525-5-63

Wang, K., Shi, H.-S., Geng, F.-L., Zou, L.-Q., Tan, S.-P., Wang, Y., . . . Chan, R. C. K.
(2016). Cross-Cultural Validation of the Depression Anxiety Stress Scale-21 in China.
Psychol Assess, 28(5), e88-e100. doi:10.1037/pas0000207

Wang, W., Bian, Q., Zhao, Y., Li, X., Wang, W., Du, J., . . . Zhao, M. (2014). Reliability and
validity of the Chinese version of the Patient Health Questionnaire (PHQ-9) in the
general population. *Gen Hosp Psychiatry, 36*(5), 539-544.
doi:10.1016/j.genhosppsych.2014.05.021

White, J. (2000). *Treating anxiety and stress : a group psycho-educational approach using brief CBT*. Chichester ; New York: Wiley.

Whiteford, H. A. P., Degenhardt, L. P., Rehm, J. P., Baxter, A. J. M. P. H., Ferrari, A. J. B., Erskine, H. E. B., . . . Vos, T. P. (2013). Global burden of disease attributable to mental and substance use disorders: findings from the Global Burden of Disease Study 2010. *Lancet, 382*(9904), 1575-1586. doi:10.1016/S0140-6736(13)61611-6

Wong, S. Y. S., Yip, B. H. K., Mak, W. W. S., Mercer, S., Cheung, E. Y. L., Ling, C. Y. M., . . . Ma, H. S. W. (2016). Mindfulness-based cognitive therapy v. group psychoeducation for people with generalised anxiety disorder: Randomised controlled trial. *Br J Psychiatry, 209*(1), 68-75. doi:10.1192/bjp.bp.115.166124

World Health Organization. (2017). Depression and other common mental disorders: global health estimates. 2017. In.

Yu, D. S. F. (2010). Insomnia Severity Index: psychometric properties with Chinese community‑dwelling older people. *Journal of advanced nursing, 66*(10), 2350-2359.

Zhong, J., Wang, C., Li, J., & Liu, J. (2009). Penn State Worry Questionnaire: Structure and Psychometric Properties of the Chinese Version. *J. Zhejiang Univ. Sci. B, 10*(3), 211-218. doi:10.1631/jzus.b0820189